

LINCOLN TUNNEL



Built, Owned and Operated by

THE PORT OF NEW YORK AUTHORITY

111 EIGHTH AVENUE, NEW YORK, N. Y.

THE LINCOLN TUNNEL, newest Hudson River crossing, is a direct link between midtown Manhattan and the communities of northern and southern New Jersey, connecting with all main through routes to the south and west. With the George Washington Bridge serving the uptown area, and the Holland Tunnel for downtown traffic, the Lincoln Tunnel rounds out the system of vehicular facilities providing for quick continuous travel across the Hudson to and from all sections of the metropolis.

It closely resembles the Holland Tunnel in general engineering features and was built by the same method. Construction started on March 29, 1934. Nearly a hundred feet below the surface of the river, working in two huge machines called shields, sandhogs built the cast iron shell which is the tunnel's outer wall. To counteract the weight of water and mud, work was carried on under compressed air. Inch by inch, huge jacks pushed the two shields forward through the river bed to meet within a quarter of an inch when the first tube of the tunnel was "holed through" on August 2, 1935. The shield progressed through the river mud at an average rate of forty feet a day.

The ventilating equipment, communica-

tions system and other operating equipment are similar to those of the Holland Tunnel, with some technical improvements developed as a result of experience. A new feature is the glass-tiled ceiling which makes possible excellent lighting without glare. The roadway is also 18 inches wider than that of the Holland Tunnel. The first tube was opened in December 1937 and is now in operation carrying two-way traffic.

The most striking departures in design are in the approach plazas and connecting roadways. In Manhattan a new north and south avenue, (Dyer Avenue), was constructed between Ninth and Tenth Avenues running from 34th to 42nd Streets. The tunnel can be approached directly via any of six cross-town streets which are also available as exits.

On the New Jersey side the main approach rises from a spacious plaza in a loop or helix six lanes wide which crosses Hudson County Boulevard East and continues upward to Pleasant Avenue. Here the highway descends, becoming a depressed roadway. At the boundary line between Union City and North Bergen is the "interchange", a three level structure. On the top deck, Hudson County Boulevard traffic moves north and south; the mezzanine level provides for

interchange between this traffic and vehicles using the lower, direct through route to and from the tunnel. West of this point the highway becomes an elevated structure connecting with New Jersey state highway routes 1 and 3.



The Port of New York Authority was created in 1921 as an instrument whereby the problems of the port might be solved cooperatively in spite of the state line which cuts the district in half. It has constructed the Lincoln Tunnel, the George Washington Bridge over the Hudson, three bridges between Staten Island and the New Jersey mainland, and Inland Terminal No. 1, New York's first union station for package freight. It refinanced and now operates the Holland Tunnel which was built by an earlier commission.

The Port Authority finances its projects by the sale of its own bonds to the investing public. Interest, amortization and operating costs are paid by charging tolls to users. No profit is made by anyone on Port Authority facilities which are held in trust for the people of New York and New Jersey.

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LINCOLN TUNNEL

Connecting
MIDTOWN MANHATTAN
with
WEEHAWKEN, NEW JERSEY

TUNNEL DATA

Length of Tunnel, portal to portal, 8,215 ft.

Length of Under River Portion 4,600 ft.

Width of Roadway 21 ft. 6 in.

Operating Headroom 13 ft.

External Diameter of Tunnel 31 ft.

Maximum Depth from Mean High Water to Roadway 97 ft.

Maximum Depth from Mean High Water to Top of Tunnel 75 ft.

Cast Iron and Cast Steel Tunnel Lining 101,850 tons.

Structural Steel Tunnel Lining 4,560 tons.

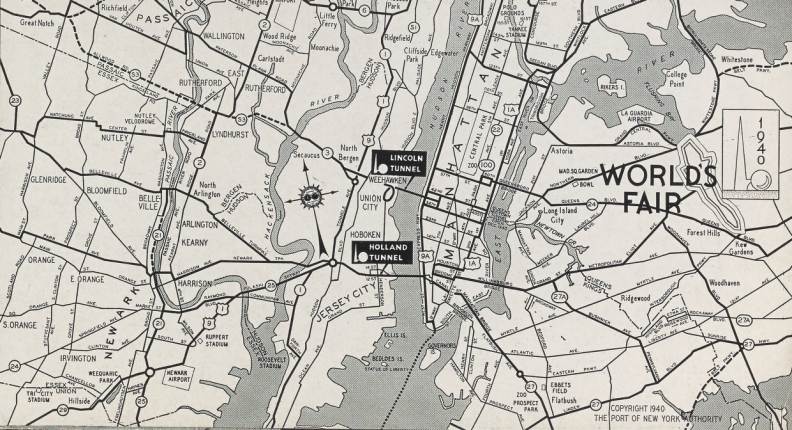
Tunnel Ventilated by 32 fans in Three Ventilation Buildings.

Maximum Ventilation 1,913,000 cu. ft. of Fresh Air per Minute, which completely changes the Air in the Tunnel every 70 Seconds.

Cost to the Port Authority \$74,800,000 exclusive of about \$10,000,000 for an Express Highway Approach across the Palisades.



Traffic Rules and Toll Rates or additional copies of this leaflet may be obtained by writing to Dept. B, The Port of New York Authority, 111 Eighth Avenue, New York, N. Y.



PASSAIC

WALLINGTON

Wood Ridge

Little Ferry

Ridgefield

Edgewater

CLIFFSIDE PARK

ASTORIA

LA GUARDIA AIRPORT

College Point

Whitestone

Forest Hills

RUTHERFORD

RUTHERFORD

LYNDHURST

North Bergen

Union City

HOBOKEN

Jersey City

NEWARK

IRVINGTON

WEEDQUAH PARK

Hillside

NUTLEY

BELLEVILLE

ARLINGTON

KEARNY

HARRISON

CLINTON

SPRINGFIELD

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WORLD'S FAIR



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